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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,174	06/13/2001	Naosumi Tada	DKT00127	5817

7590 07/30/2002

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EXAMINER
JOHNSON, VICKY A

ART UNIT	PAPER NUMBER
3682	

DATE MAILED: 07/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary	Application No.	Applicant(s)	
	09/880,174	TADA, NAOSUMI	
	Examiner	Art Unit	
	Vicky A. Johnson	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 16 June 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 12 and 21, it is unclear how the blade springs can have surfaces in sliding engagement and have a friction surface between those same surfaces.

Claims 7-11 recites the limitation "the friction parts" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In claim 18, it is unclear and therefore confusing how a set of blade springs can be comprising a blade shoe.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 12, 13, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Cradduck et al (US 5,055,088).

Cradduck et al disclose a blade tensioner for applying tension to a chain, the blade tensioner comprising: a blade shoe (30) having a first face and an opposing second face (see Fig 2), the first face having a chain sliding surface on which the chain is slidable (see Fig 2); at least two adjacent blade springs (21,22) each having an upper and lower planar surface (see Figs 3 and 4A), disposed on the second face of the blade shoe for applying a spring force to the blade shoe (col. 2 lines 54-59), the adjacent blade springs having surfaces contacting in sliding engagement (see Fig 2); and a friction surface provided between the contact surfaces of the adjacent blade springs having a coefficient of friction selected to provide sliding resistance there between effective to damp vibrations of the tensioner (inherent, because any two surfaces in contact have a coefficient of friction and provide some sliding resistance, which will damp some vibrations).

Re claims 13 and 22, the friction surface is formed on at least one of the blade springs (inherent).

6. Claims 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lord (US 1,443,545).

Lord discloses set of spring blades comprising: a first blade spring (1) having an upper and a lower planar surface (see Fig 1); a second blade (2) spring having an upper and a lower planar surface disposed below the first blade spring (see Fig 1), the lower planar surface of the first blade spring and the upper planar surface of the

second blade spring in sliding engagement; and a friction surface (5) provided between the lower planar surface of the first blade spring and the upper planar surface of the second blade spring (see Fig 1) having a coefficient of friction selected to provide sliding resistance there between effective to damp vibrations of the tensioner (col. 1 lines 8-12).

Re claim 13, the friction surface is formed on at least one of the blade springs (col. 2 lines 72-78).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2, 3, 7-9, 14, 15, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cradduck et al (US 5,055,088) in view of Lord (US 1,443,545).

Cradduck et al disclose a blade tensioner as described above, but do not disclose the friction surface being a plate-like member extending in the length direction of the blade springs and is provided independently from the blade springs.

Lord teaches the use of blade springs (2) having a friction surface being a plate-like member (10) extending in the length direction of the blade springs (see Fig 1) and is provided independently from the blade springs (col. 4 lines 75-85).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the springs of Cradduck et al to include plate member between the springs as taught by Lord in order to decrease wear between the springs and decrease noise (col. 1 lines 8-12).

Re claims 3 and 23, Lord shows the friction surface comprises a plate-like member extending in the length direction of the blade springs (see Fig 1) and attached to at least one blade spring through bonding or welding (col. 3 lines 54-62).

Re claims 7, 8, 9, Lord shows the friction parts are configured using rubber (col. 1 lines 15-19), plastic, or friction paper.

Re claim 14, Lord shows the friction surface comprises a friction plate (10) disposed between the blade springs (see Fig 1).

Re claims 15 and 24, Lord shows the friction plate is attached to at least one of the blade springs (col. 3 lines 54-62).

9. Claims 4-6, 10, 11, 16, 17, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cradduck et al (US 5,055,088) in view of McCutcheon et al (US 5,691,037).

Cradduck et al disclose a blade tensioner as described above, but do not disclose the friction surface comprises a plurality of members extending in the length direction of the blade springs and attached to at least one blade spring through bonding or welding.

McCutcheon et al teaches the use of two surfaces (56,60) having a friction surface comprises a plurality of members (58) extending in the length direction of the surfaces (see Fig 3D) and attached to at least one surface through bonding (col. 16 lines 1-5) or welding.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of transverse members between the spring blades of Cradduck et al as taught by McCutcheon et al in order to improve vibrational damping (col. 10 lines 31-32).

Re claims 5 and 6, Cradduck et al show the blade spring and McCutcheon et al show and render obvious the bumpy surfaces (58) created on contact faces between the friction surface and at least one surface (see Fig 3D).

Re claims 10 and 11, McCutcheon et al show the friction parts are configured using rubber (col.11 lines 9-16), plastic, or friction paper.

Re claims 16 and 25, Cradduck et al show the blade springs and McCutcheon et al show and render obvious the friction surface comprises a plurality of transverse members (58) disposed between the surfaces (see Fig 3D).

Re claims 17 and 26, Cradduck et al show the blade springs and McCutcheon et al show and render obvious at least one of the plurality of transverse members (58) is attached to at least one of the blade springs (see Fig 3D).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1,874,724	Watson	(inserts with spaces)
1,335,138	Summers	(plate insert)
1,527,022	Watson	(bumpy surfaces)
2,028,299	Swinton	(plate insert)
EP-0055166	Kohler	(plurality of springs)
5,711,732	Ferenc et al	(tensioner with base)
6,364,796	Nakamura et al	(tensioner)
5,797,818	Young	(dampener)
5,425,680	Young	(tensioner with base)
3,490,302	Turner et al	(tensioner)
5,984,815	Baddaria	(blade springs)
2,814,481	House	(wear surfaces)
3,456,939	Duchemin	(damper)
2,667,347	Jacobs	(liner)
2,735,672	Bradley	(liner)
3,159,389	Clary	(liner)
2,184,381	Figgie et al	(plate insert)
1,759,722	Watson	(insert)
1,566,940	White	(insert)
2,873,962	Lampman et al	(insert)
2,801,100	Crites	(insert)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (703) 305-3013. The examiner can normally be reached on Monday-Thursday (7:00a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Bucci can be reached on (703) 308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

DAVID A. BUCCI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

vaj 7/24/02
July 24, 2002